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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/714,244

11/14/2003

Michael W. Shapiro

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EXAMINER

YAARY, MICHAEL D

ART UNIT

PAPER NUMBER

2193

MAIL DATE

DELIVERY MODE

07/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/714,244	Applicant(s) SHAPIRO, MICHAEL W.	
	Examiner Michael Yaary	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,8,21,22,24 and 26-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,8,21,22,24 and 26-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 3, 5, 8, 21, 22, 24, and 26-32 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5, 8, 21, 22, 24, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien et al. (hereafter O'Brien)(US Pub. 2002/0095660) in view of Berry et al. (hereafter Berry)(US Pat. 6,678,883) and further in view of Delagi et al. (hereafter Delagi)(US Pat. 5,655,121).

4. O'Brien and Berry were cited in the previous office action dated 2/08/2007.

5. **As to claim 1**, O'Brien discloses a method for tracing a program (abstract and [0002], lines 1-4) comprising:

Generating a trace object code from trace source code ([0041], lines 4-7);

Processing component information of the trace object code to generate the object file ([0051], lines 1-6); parsing the object file by a tracing framework and tracing the program ([0049], lines 1-12 and [0050], lines 1-17).

6. O'Brien does not disclose the object file comprises a linear sequence of bytes comprising:

A file header, a first section header of type enable control block (ECB), a second section header of type action, a first section data entry associated with the first section header and a name of a second section data entry of type action, and the second section data entry associated with the second section header defining at least one selected from a group consisting of a predefined action and a name of a third section data entry of type program object code corresponding to an action.

However, Berry discloses the object file comprises a linear sequence of bytes (Column 12, lines 20-27; and column 13, lines 28-30 disclose that the symbol file can be generated before the performance trace is executed, thus not being generated as a result of the tracing but instead containing information to be used during the tracing.) comprising:

A file header (Column 13, line 59- column 14, line 6), a first section header of type enable control block (ECB)(column 14, lines 7-25), a second section header of type action (column 14, lines 26-37), a first section data entry associated with the first section header and a name of a second section data entry of type action, and the second section data entry associated with the second section header defining at least one

selected from a group consisting of a predefined action and a name of a third section data entry of type program object code corresponding to an action (column 14, lines 37-65 and headers and symbolic data entries of figure 10b).

7. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of O'Brien by including an object file comprising a file header, section headers, and data entries, as taught by Berry, for the benefit of successfully being able to produce object files from source files in a software analysis system, as these parts of the object file are integral components that make up an object file.

8. O'Brien and Berry do not disclose a name of a probe to enable, enabling and encountering the probe, and executing at least one selected from a group consisting of the predefined action and the action associated with the probe to obtain data.

However, Delagi discloses a name of a probe to enable, enabling and encountering the probe, and executing at least one selected from a group consisting of the predefined action and the action associated with the probe to obtain data column 4, lines 27-61 and column 5, lines 5-42 disclose the enabling and executing of probes in a tracing environment, thus can be used in combination with the object code tracing of O'Brien and Berry).

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9. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of O'Brien and Berry, by enabling and encountering a probe, as taught by Delagi, for the benefit of effectively distinguishing points of code for testing, as probes can be set to specifically analyze certain performance problems.

10. **As to claim 3**, O'Brien further discloses saving the object file in a persistent data store ([0042], lines 2-4).

11. **As to claim 5**, Delagi discloses the trace source code comprises a probe description associated with the probe, wherein the probe description comprises an optional predicate and the action (column 5, lines 5-42).

12. **As to claim 8**, Berry further discloses assigning a unique identifier for each section header in the plurality of section headers (column 14, line 66-column 15, line 7).

13. **As to claim 21**, the claim is rejected for the same reasons as claim 1 above, and in addition O'Brien discloses a processor (control processor 134 in figure 6); a memory (control memory 136 in figure 6); and a storage device (database 65 in figure 3).

14. **As to claim 22**, the claim is rejected for the same reasons as claim 8 above.

15. **As to claim 24**, the claim is rejected for the same reasons as claim 3 above.

16. **As to claim 26**, the claim is rejected for the same reasons as claim 5 above.

17. **As to claim 27 and 30**, Berry further discloses the third section data entry comprises the program object code corresponding to the action (object code in figure 10b).

18. **As to claim 28 and 31**, Berry further discloses the program object code is executed by a virtual machine (column 7, lines 35-47).

19. **As to claim 29 and 32**, Berry further discloses a third section header comprises a name of a fourth section data entry comprising program object code associated with a predicate (figure 10b) and Delagi discloses the program object code associated with the predicate is executed when the probe is encountered during tracing (column 5, line 5-column 6, line 5).

Response to Arguments

20. Applicant's arguments with respect to claims 1, 3, 5, 8, 21, 22, 24, and 26-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Yaary whose telephone number is (571) 270-1249. The examiner can normally be reached on Monday-Friday, 8:00 a.m - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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